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State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

July 2, 2014

Chris Kaiser
Kennecott Utah Copper LLC
4700 Daybreak Parkway
South Jordan, Utah 84095

Subject: Third Review of Response to Division Directive, Kennecott Barneys Canyon Mining, Barneys Canyon Mine, M/035/0009, Salt Lake County, Utah

Dear Mr. Kaiser:

The Division of Oil, Gas and Mining has completed a review of the response to comments received on June 30, 2014. The attached comments need to be addressed.

The Division would like cleanup to commence as soon as possible. Subject to approval from other appropriate agencies (see below), Kennecott Barneys Canyon Mine may commence with cleaning up the Clay Hollow drainage west of Highway 111, along segment 1, as defined in Figure 1 dated April 16, 2014. Prior to the cleanup of the drainage west of the Copperton Rail line (segments 2 through 4 in Figure 1 dated April 16, 2014), provide updated drawings to cover the additional segments. In the attached review, please address the remaining comments in the time frame noted with the comment.

The approval or acceptance of this response to the Division Directive does not relieve Kennecott Barneys Canyon Mining from its responsibility to comply with the applicable statutes, rules, regulations, and ordinances of all local, state and federal agencies with jurisdiction over any aspect of the mining operations.

The Division will suspend further review of the response to the Division Directive until your response to this letter is received. Please contact Leslie Heppler at 801-538-5257 or me at 801-538-5261 if you have questions about this review. Thank you for your cooperation in completing this permitting action.

Sincerely,

Paul B. Baker
Minerals Program Manager

PBB: lah: eb

Attachment: Review

cc: Doug Bacon, Hans Millican, Brian Hamos, Dan Hall, and David Allison, DEQ (dbacon@utah.gov, hmillican@utah.gov, bhamos@utah.gov, dhall@utah.gov, dallison@utah.gov, Kerri Fiedler, EPA (fiedler.kerri@epa.gov)

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Chris Kaiser
M/035/0009
July 2, 2014

**Review of Response to Division Directive
Kennecott Barneys Canyon Mining
Barneys Canyon Mine
M/035/0009
July 1, 2014**

General Comments:

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
Prior #1		<p>The Division requires that Kennecott Barneys Canyon implement a planned preshift inspection of the leach pads, until such time as erosional issues have been satisfactorily addressed. Please submit an amendment to the Notice of Intention with a proposed schedule, as per rules R647-4-107.3 and 107.4.</p> <p>This is an ongoing function with an ongoing submittal</p>	lah	

R647-4-106 - Operation Plan

106.8 - Depth to groundwater, extent of overburden, geologic setting

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
Prior #3	Omission	<p>Please provide data from other groundwater wells in the area. Include geologic log.</p> <p><i>Please provide arsenic data to attachment #6b.</i></p> <p><i>Addendum 7 is adequate for construction to begin, as general lithology is on the log. The detailed lithology has been cut off in the copying process, Please provide by July 14, 2014, in the form of replacement pages as an amendment to the plan.</i></p>	lah	

R647-4-109 - Impact Assessment

109.1 – Projected impacts to surface & groundwater systems

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
Prior #9	Omission	<p>Propose a ground water monitoring location in segment 3. Include specifics of the well construction details and monitoring protocol. Additional monitoring locations might be warranted dependent upon results.</p> <p><i>Based on email communication from Brian Vinton, only a shallow ground water monitoring hole is warranted at this time. It would be a corporate decision by Kennecott to place a deeper nested ground water open standpipe piezometer (OSP) unless future analytical results show otherwise. Please include the email verbiage of the subsurface geology discussion and the verbiage from Attachment #1 (comment 9) in the text of the response submittal in Attachment #8. In summary, consolidate all geology under Attachment #8.</i></p> <p><i>Ground water monitoring is not required by R647, but as per R647-4-107-2, "If natural channels are to be affected by mining operation, then the operator shall take appropriate measures to avoid or minimize environmental damage". The Division recommends installing a shallow ground water monitoring well.</i></p> <p>This comment warrants further discussion, but it is not necessary for clean up construction to begin.</p>	lah	

109.4 – Projected impacts on slope stability, erosion control, air quality, public health and safety

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
Prior #18	Addition to NOI	<p>Provide an amendment to the Notice of Intention (NOI) re-evaluating the projected impacts of the Barneys Canyon mine on erosion control, air quality, and public health and safety.</p> <p>This comment does not need to be addressed prior to construction clean up, but is to be submitted by September 15, 2014.</p>	lah	

109.5 - Actions to mitigate any impacts

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
Prior #19	Addition to NOI	<p>Provide an amendment to the NOI on Kennecott Barneys Canyon's actions to mitigate sediment and deleterious materials releases which might impact the environment.</p> <p>This comment does not need to be addressed prior to construction clean up, but is to be submitted by September 15, 2014.</p>	lah	